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a semiconductor body of a first conductivity type, said semiconductor body including a semiconductor region of the first conductivity type provided between said two electrodes, said semiconductor region of the first conductivity type being configured to sustain a reverse voltage applied to said electrodes; 5

semiconductor regions of a second conductivity type disposed in at least one plane extending essentially perpendicularly to a connecting line extending between said two electrodes, the second conductivity type being 10 opposite to the first conductivity type;

a cell array disposed under one of said electrodes in said semiconductor body;

filiform semiconductor zones of the second conductivity 15 type having a dopant concentration of less than 10^{16} charge carriers cm^{-3} ; and

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at least some of said semiconductor regions of the second conductivity type being connected to said cell array via said filiform semiconductor zones of the second conductivity type.

8. The semiconductor component according to claim 1, wherein each of said filiform semiconductor zones has a center, an outer edge and a total charge integrated from said outer edge to said center, said filiform semiconductor zones are configured such that said total charge is less than a breakdown charge.

9. The semiconductor component according to claim 2, wherein said filiform semiconductor zones are doped more weakly than said semiconductor regions of the second conductivity type.

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